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CONGRESSIONAL DOCUMENT.

TOPOGRAPHICAL ENGINEERS.

[To accompany bill H. R. No. 104.]

JANUARY 12, 1836.

Mr. R. M. JOHNSON, from the Committee on Military Affairs, made the following

REPORT:

The Committee on Military Affairs, to which was referred the reorganization of the corps of Topographical Engineers, report:

That they refer to their report of the last session,* and to the report from the Topograpical Bureau of this session, as a part of the present report, and they also report a bill.

TOPOGRAPHICAL BUREAU,

Washington, Nov. 2, 1835.

Hon. LEWIS CASS, *Secretary of War:*

SIR: In obedience to your instructions of the 4th of September last, I have the honor to submit to you a statement, marked A, exhibiting the amount drawn from the Treasury Department and remitted to the disbursing officers under this bureau, from the 1st of October, 1834, to the 31st of September, 1835, inclusive, and the amount of accounts rendered.

The topographical and civil engineers have been employed upon, and the funds appropriated for surveys for the year 1835 have been applied to, the following objects:

1. An examination of the route for a rail-road from Memphis, in Tennessee, to the Atlantic ocean.

2. A report and estimate of the cost of the construction of the Portage summit of the Ohio canal, that is, the canal from Pittsburg to Lake Erie.

3. Survey with a view to the improvement of the Cumberland river from Nashville, Tennessee, to the head of navigation in Kentucky.

4. The report of the geological investigations made of the public lands, and of the Territory of Arkansas.

5. A survey of the harbor of St. Joseph's, in the Territory of Michigan.

6. A survey of the harbor at the mouth of Trail creek.

These surveys and reports from 1 to 6 inclusive, have been completed since the last annual report, and were reported to Congress during its last session.

7. A survey of the Delaware river from Newcastle to Port Penn, and a survey of Pea Patch island.

These surveys embrace an exposition of all the facts necessary in the digesting of a system of the defence of that pass in the river, as well as all those necessary to its navigation. The duty is completed and the maps delivered to the bureau.

8. A survey of the Brandywine shoal. The object of this survey is to determine the best position on the shoal for the construction of a light-house. It is a highly important point in the navigation of the Delaware bay, but its exposed situation, and the composition of the shoal, make it one also of extreme difficulty in the establishing of a foundation which will endure, and sustain the superstructure for the light.

The appropriation for this object was made in June, 1834, and in the following words:

"For rebuilding the light-house on Brandywine shoals, in the bay of Delaware, thirty thousand dollars: *Provided, however*, That, before the commencement of the work, a re-survey, plan and estimate shall be made, and that then it shall be in the direction of the proper department to enter upon the rebuilding of the said light-house, or to report such survey, plan and estimate to Congress as shall be considered best for the public interests."

The survey was commenced as soon as the necessary arrangements could be made, and it was ascertained in a short time that the appropriation was entirely inadequate to the object, which, as a measure preliminary to the building of the light-house, required that an artificial foundation should be established upon a sandy shoal, in the mouth of a wide bay, and exposed to the violence of the waves of the Atlantic.

Under these circumstances, the alternative presented by the law was adopted, and the survey, plan and estimate were presented to Congress during its last session.

As it was not acted upon, additional investigations have been since made, and their result is the foundation of an item in the estimate from this office for the "rebuilding of the light-house on the Brandywine shoal."

The report, estimate, and plan, in all their details, are daily expected from the engineer who had this survey in charge, which, as soon as received, will be laid before you.

The amount appropriated in the act of June 30, 1834, was 30,000 dollars, of which 1,550 dollars have been drawn out of the Treasury for the necessary preliminary surveys. The total amount of the estimate of the engineer is $123,985 93, leaving for the object a deficiency of $95,535 93, which amount constitutes an item in the estimates of this bureau.

9. In the drawings and reports of various parts of canal routes across the States of Maine, New Hampshire, and Vermont, in order to complete a series of surveys for the same objects which had been partially attended to some years since. All the field work of these surveys is completed; the drawings and reports only have to be made; these, it is expected, will be delivered to the bureau during the ensuing winter.

The delay which this work has experienced has been an unavoidable result, from the small number of the corps, which forced the bureau to extend the attention of the officer superintending this to other duty.

10. The drawings and reports of the military defences of parts of the coasts of North and South Carolina. The system of army details, which removes our assistants before the completion of the particular duty upon which they have been engage, together with a diversion of the attention of the superintending officer to other surveys, has occasioned the delays which these works have experienced. There is, however, every reason to believe that they will be completed during the ensuing winter.

11. A survey of a canal route from Cape Fear river, through the Waccamaw lake, to the Waccamaw river, North Carolina. The returns of this are daily expected.

12. An examination of the construction of the canal around the Muscle sholes of the Tennessee river.

13. An examination of the route for a rail-road from Portland, in the State of Maine, to Quebec, in Canada.

14. The survey of a rout for a rail-road from the Connecticut river, to intersect the Concord rail-road, in New Hampshire.

15. The survey of a rout for a rail-road from Boston, in Massachusetts, to Whitehall, in New York.

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*See Army and Navy Chronicle, Vol. I, No. 4. Jan. 22, 1835, page 29.

16. A survey of the harbor of East Thompson, in Maine.

No. 16 is completed, and the results are expected at the bureau early during the ensuing winter. Numbers 13, 14, and 15, are not in as great a state of forwardness. The extensive views embraced by these three, and the lateness of the season when the attention of the officer who has them in charge was called to 14 and 15, render it highly probable that no definite report will be made by him until during the course of the next year.

17. A survey of the Christiana river from Wilmington to the Delaware, with a view to improve the entrance of the Christiana. This is completed.

18. A survey of Provincetown harbor and its vicinity. The survey of this position, so important in the military defences of the coast east of Cape Cod, and as a point of shelter for our commerce from a pursuing enemy, or from storms, is now completed. All the field work is done, and the drawings and reports will also be, during the present year.

19. The survey of a route for a ship canl around the falls of Niagara, effecting a junction with the two lakes, Erie and Ontario. The field work of this duty is completed; the drawings and reports are in progress, and will be delivered to the bureau during the ensuing winter.

20. A survey of the channel between the North and South Hero islands, on Lake Champlain. This duty is also so far completed, that the drawings and reports will be delivered to the bureau during the present year.

21. A survey of a route for a road from the Alabama line, by Marianna, to the town of Appalachicola, in Florida. This duty was completed, but, before entering upon the opening of the road as required by the law, it was thought advisable to examine a different route which would apparently much shorten the distance. This examination is now making.

22. A resurvey of the route of the national road between Springfield, Ohio, and Richmond, Indiana; also from Springfield, by the way of Dayton and Eaton, to Richmond. This duty has been completed, and the drawings and report delivered to the bureau. These last have also, in conformity with the law, been submitted to the President, who has affixed his approbation to the location of the direct route.

23. A survey of the Maumee river, from its mouth to Maumee city, completed, and the drawings received.

24. A survey of the route for a rail-road from Detroit to Pontiac.

25. Also the route of a rail-road from Detroit to the St. Joseph's river.

These surveys have been completed, and the returns duly made.

26. A survey of the route of a road from Chicago to Fort Howard, on Green Bay.

27. A survey of the mouth of Gallean river.

28. A survey of the mouth of Black river.

29. A survey of the mouth of Milwalkee river.

These four (26, 27, 28, and 29) are now in progress, and it is expected will be completed this fall and the ensuing winter.

30. A survey of a rail-road from Memphis, Tennessee, to such point on the lines of the States of Virginia and Tennessee, as may be best adapted, in the opinion of the engineer, to facilitate the continuation of the road to the Chesapeake. The survey is now in progress.

31. A survey of a route for a road from the Maumee river, through the northern counties of Indiana, to or near the rapids of the Illinois river, and thence to the Mississippi river at some point between Rock Island and Quincy. The field work of this survey is completed, and the drawings and reports are expected to be delivered to the bureau during the course of the present year.

32. The survey of the following routes for roads in Indiana:

Lawrenceburg and Indianapolis rail-road.
Madison and Lafayette rail-road.
Evansville and Terre-Haute rail-road.
Columbus and Jeffersonville rail-road.
New Albany and Vincennes turnpike-road.
New Albany and Crawfordsville turnpike-road.

33. In superintending the construction of the aqueduct over the Potomac at Georgetown. This may truly be considered one of the most interesting and one of the most difficult of civil constructions ever attempted in our country. The object of the work is to conduct the Chesapeake and Ohio canal over the river Potomac, at the upper end of Georgetown, and thereby to furnish to its trade a termination in the fine harbor of deep water at Alexandria.

The length of the acquiduct is 1,700 feet, (includ the causeways,) sustained by two abutments and six piers, at a height of 29 feet above the common high tides of the river. These abutments and piers are all to rest upon the natural rock foundation which is found throughout the length of the acquiduct, at a depth nearly uniform of 30 feet below common high water, making the total height of each pier 59 feet.

The sncccssful establishment of a foundation at such a depth, in water and mud, is among the most difficult problems in the practice of the engineer, and the experience of the world has furnished so few instances of similar attempts, that he is comparatively without those guides which are in other instances so easily obtained.

But the persevering efforts of science and mechanical skill supplied the deficiency of information from precedents, and overcoming all obstacles, triumphed in the successful establishment and completion of one pier during the course of the last season, and in a successful issue to the greatest difficulties in the establishment of a second, and of one of the abutments.

This work is the result of the enterprise of an incorporated company; but as the United States furnished a proportion of the funds for its aid, the company considered it advisable, and applied, to have its expenditure placed under the direction of an officer of the corps of topographical engineers, that any desired investigation in reference to the faithful and judicious application of the means allowed by the United States, could be made independently of their control, and that they might also, in so difficult and rather unprecedented an undertaking, avail themselves of the presumed science of its officers.

It affords me much satisfaction to add, that a frequent inspection, as well of the work as of the expenditures, has resulted in a conviction of the great skill and judgment of the engineer, and of the faithful application of the funds The books exhibit the most minute detail of expenditure for every object; and his mechanical arrangements have been justly admired by all who have visited the work. The engineer is prepared, whenever it shall be called for, to present the most satisfactory statesments, descriptions, reports, and drawings, in reference to the whole.

34. In the survey of a rail-road from Pensacola, in Florida, to Columbus, Georgia. Although Pensacola is one of the finest harbors on the Gulf of Mexico, and, in fact, of the United States; and although it is also, at present, an established navy yard and navy depot, yet, as the land in its vicinity is extremely poor, and there is no river leading from its harbor to the interior, its commercial advantages are but partially felt, and the population necessary to its defence exposed to hazardous and difficult, or tedious and dilatory, methods of access. The remedy for these evils is in improving all means of communicating with the richer soil and denser population of the interior, and the road now being surveyed will eminently accomplish these objects. It will open to the products of the interior a cheap and rapid means of access to an uncommanly fine harbor, and will enable that

harbor to command for its defence, the strength of the interior in the shortest possible time. It possesses, therefore, a highly national aspect, deserving of the patronage which has been extended towards it by the General Government, in permitting its officers to superintend the work.

35. In a continuation of the mineralogical and geological investigations of the public lands, the territories, and the Indian country. The highly interesting results from the geological investigations of the last year, under the same officer who has now those of this year in charge, are the best earnest of the manner in which these will be performed.

His instructions were, that, "it being desirable to have some knowledge of the mineral structure of the Coteau de Prairie, an elevated ridge which separates the Missouri from the St. Peters, a tributary of the Mississippi, you are directed to proceed to that vicinity, and to make such investigations as the season and the nature of your opportunities will admit. It is desirable, also, that you should take Green Bay in your way, with a view to the examination of the mineral structure in the vicinity of the Ouisconsin river."

Early history had mentioned the "Coteau de Prairie" as a locality rich in its deposite of copper in its various forms. Records, which are presumed to be deserving of confidence, state, that many tons of this mineral had been taken at an early period of our history to France, and there smelted to advantage. There is no doubt that it exists in that region, but in what quantities, and in what particular places, have yet to be ascertained.

From the known intelligence, great zeal, and untiring perseverance of Mr. Featherstonhaugh, no doubt is entertained that all that can be will be done in accomplishing the discovery; but he has to contend with the difficulties of an unknown and wilderness country, and in a climate affected early in the season with the inclement weather of winter. Should his report, therefore, not be as much in detail as is desirable, (of which there is some reason to fear,) there is no doubt, that every accessible general indication will be ascertained, sufficient to form the most encouraging basis, and the best justification for future and more detailed investigations.

The great interest which is felt by the country in reference to this particular duty, exhibited by an unparalleled demand for the report of the proceedings of last year, is no equivocal proof of the value which is placed upon it, and the advantages which are anticipated to result from it. Such investigations are beyond the resources of individuals; and the States limit those which they authorize, to the extent of their territories. If the United States does not, therefore, complete the chain of knowledge by a continuation of its efforts in reference to the public lands and the territories, an extensive region, rich with the most valuable ores, will continue to remain unknown. Under these impressions, I have hazarded a small item in the estimate from this office, to enable it the more satisfactorily to complete a duty which has been so fortunately begun.

It may probably be observed, that in the foregoing statement of surveys, there are many enumerated which were not ordered by a resolution of either House of Congress, or by any law.

The rules which have been prescribed for this office in these matters, are as follows: That 1st, surveys ordered by law, and for which there are, generally specific appropriations, should be attended to.

2d. Surveys ordered by resolutions of Congress. The expenses of these are paid out of the annual appropriation for surveys, including the pay of the civil engineers, which is taken out of the same appropriation.

3d. Surveys of a national or highly interesting commercial character, applied for States or incorporated companies. In these cases, such officers as can be spared, (with their instruments,) are allowed to be assigned. All other expenses including those for additional engineers, or additional instruments, are supplied by the parties interested in the survey, the United States being subjected to no charge on these accounts; or in other words, confining the aid from the United States to the mere loan of such engineers, and of such instruments, as can be conveniently spared.

In the execution of the foregoing duties, the whole force of this bureau, in military as well as civil engineers, has been employed. Its military engineers consist of the corps of topographical engineers and such lieutenants of the army as are detailed for its duties; its civil engineers, of those authorized to be employed under the authority of the law of the 30th April, 1824.

The first embraces, of the corps of topographical engineers, - - - -	10	officers.
Of lieutenants now detailed for this duty from the army, - - - -	26	do.
The second, being citizens without military rank, employed under the act of the 30th April, 1824, - - -	13	
Making the whole force of engineers employed under this bureau equal to,	49	

The evils of these military details arise from,

1st. The shortness of the time in which an officer being placed on the duty, has to acquire that practical knowledge in the use of instruments, and the habit of applying his scientific knowledge to results in practice, without which he can be of no value.

2d. The apathy which oppresses a temporary detail, from the consciousness that if he labors, it is to acquire, which, as soon as it obtained, he will, in all probability, he removed from the only sphere of action in which it can be applied.

3d. When the temporary detail is endeavoring partially to acquire a knowledge of the duties of the corps to which he is attached, he must, from the very nature of things, lose, by its disuse, much of the knowledge of his proper arm of service, and when he returns to it, be consequently a less valuable officer than when he left.

4th. The corps is, under this system, continually exposed in the execution of its duties, to those consequences which must flow from the services of unqualified and consequently incompetent assistants, and is forced from this cause to increase its demands upon the army, that it may compensate partially by numbers for deficiencies in experience. These demands, if complied with, but increase the general evil before alluded to; they cannot be complied with but partially, as the line has duties for which these subordinates were intended, and which it would not do to neglect. We are placed thereby in a continued series of unpleasant bickerings with the line. The corps endeavors to retain its experienced assistants as long as possible, because they are essential to the well-doing of its duties. The line regrets these details, however temporary; it seeks to reduce them to short periodical tours, and is continually endeavoring to get back the older assistants. It is a system, therefore, in which the permanent interests of the line and of the corps are diametrically opposed, and which, as might well be supposed, by the occasional success of either has left one or the other exposed to the reproach of negligence or favoritism.

There is no one more strongly impressed than myself with the efforts which the line now makes in order to aid us in our duties, and that it cannot do more without a sacrifice of its own; but, at the same time, I must acknowledge that, after many years of experience, I am satisfied that the duties of the topographical engineers can only be carried to that extent of perfection and intelligence which the country has a right to expect, by a system which shall permanently attach its assistants to the corps.

The effect of these details from the army for the duties of this corps may be expressed in a few words. If temporary and periodical, it is a sacrifice of the duties of the corps; if permanent, while they yet retain their rank and its privileges in the line, it is, to the extent of the number detailed, a sacrifice of the interests and duties of the line.

The civil engineers employed under the act of April 30, 1824, are officers without military commissions or military rank. The law recognises no distinction of grade or of title between them, although the custom of service has divided them into the two classes of civil engineers and assistant civil engineers. The rules and articles of war, and the army regulations, cannot be extended over them. There is, therefore, an absence of legal authority in relation to their control, and also of defined right in relation to their privileges, from which it will be seen that no subordination or authority can well be established in such a service. No serious evils have yet resulted from it, owing, however, more to the correct moral bearing of the gentlemen who hold these appointments, than to any well-defined power over them. Among the greatest inconveniences of this arrangement, is the difficulty of associating the two kinds of engineers on the same duty. The military engineer is unwilling to be placed under the civil, and probably cannot be by law, or in a way that would involve any legal responsibility. The civil engineer is equally unwilling to be viewed as subject only to be commanded, without the hope of ever enjoying the right of commanding in turn. It is a moral prostration of his branch of service to another, without the prospect of ever being relieved from it, and adapted to engender painful and unpleasant feelings, as well as being in itself unjust.

Another evil is, that this mixed arrangement of military and civil appointments, is destructive of a proper *esprit de corps*, and of that united emulation which exerts the whole mass of mind to elevate the duties of that branch to which it belongs.

With a service so constituted, and beset with inconveniences so detrimental to its duties, this bureau has been struggling for years, sparing no efforts, however, to do the best which could be done, with the means placed at its disposal.

The means have already been represented generally. I shall now speak of them numerically and economically, with a view of submitting a plan which will, if adopted, remedy all the evils, and without additional cost.

The military engineers consist,

1st. Of the corps of topographical engineers, ten in number. Of these, one receives the pay of a lieutenant colonel, five have the pay of majors, and four the pay of captains. The annual compensation of the whole is $14,496.

2d. Of the temporary details from the army.—These vary from 25 to 30. There are now 26 on this service. The annual compensation of these is $23,344.

The civil engineers consist of those employed under the act of the 30th April, 1824. Taking the average of the last three years, their number is 13, and their annual compensation is $16,700.

The entire annual cost of the whole number of officers on topographical duty is therefore $43,540.

In the above statement, it will be perceived that the officers detailed from the army, are included in the sum of the total cost. All these details receive their pay out of the general appropriation for the army, and it does not therefore appear in any estimate for the corps of topographical engineers or for surveys; yet, as this number is always employed on topographical duty, their pay is justly chargeable to that branch of service, and is therefore included in the sum of its annual cost.

The compensation for the civil engineers, is taken from the customary annual appropriation for surveys.

From the foregoing it will therefore be perceived that the present force and rank of officers for topographical duty consists, in its present mixed and complicated organization, of one lieutenant colonel commanding, five majors, four captains, twenty-six lieutenants of artillery and infantry, and thirteen civil engineers.

Now, the remedy proposed is to incorporate the whole, or a part, in one regular corps, with the usual grades of military rank, and to subject the whole to the rules and articles of war.

The subject has been treated with much ability by the chairman of the military committee, in a report to Congress during the last session. Allow me respectfully to refer you to that report for some views which are not incorporated in this.

But taking the opinion of the distinguished chairman of that committee as the best basis for an improved organization, it results in the recommendation of a corps to consist of one colonel, one lieutenant colonel, four majors, ten captains, ten first lieutenants, ten second lieutenants; in all, thirty-six engineers, of which the total annual cost will be $40,454. Our present imperfect organization gives forty-nine engineers, of which the total annual cost is $43,540; making an annual difference in favor of the organization of $3,086.

The plan submitted presents two questions which require explanation; one referring to the numbers, the other to the cost.

The lesser numbers of the proposed plan are considered capable of doing more duty than the greater numbers of the existing plan; because, 1st, of their better organization. 2d. And of always controlling the experience acquired, which, accumulating to the same individuals, gives that facility and aptness of execution, and readiness in the application of theoretical knowledge, which will enable the lesser numbers in the one case, to do more and better work than the greater numbers in the other. It is, in fact, but an application of the simple axiom, that he who is acquainted with the theory and practice of any profession can do more of it, and better, than any number of those who have not this knowledge.

3d. The number is also based upon the consideration that these were now, and would for many years be, fully adequate to the wants of the General Government for topographical duties.

In reference to the cost, two considerations have been made; one, to be found in the report of the Military Committee of the last session, which reduced the army proportionally to the number transferred from it to the corps. This, of course, would result in a positive reduction of the army estimates, or a transfer of a portion to the estimates of the corps, and would make a positive saving of the amount previously stated, but the army would probably suffer inconvenience from the reduction. It is divided into so many small posts, and extended over so vast a space of country, that it could not feel less the inconveniences of the reduction than it does those of the details. These are already oppressive to its duties. Although the reduction of the army estimate would be thereby a proportional reduction of army expenditure, the reduction would be at the expense of the organization of the army and of its duties, and might, therefore, although a saving, not be considered a true economy.

The other, to leave the army as it is, and organize the corps as it should be. Under this consideration, the total amount of present appropriations absorbed by the proposed organization would be, for the corps of topographical and civil engineers, $31,200; but as the total cost of the proposed corps is stated to be $40,454, it would leave an annual deficiency over our present appropriations of $8,254.

Under either view, the authority to employ civil engineers under the act of the 30th April, 1824, is to be repealed; of course the amount of their annual

compensation ceases with the passing of the law for the new organization.

But as a plan which leaves the army in its present form is, under all circumstances, the better, that for the organization of the corps, which will be presently submitted to you, will be made in accordance to it.

The plan submitted last year, while it authorized a complete organization, embraced a feature of periodical promotions, until the organization should be complete. Such a course is not unfrequent in the extension of scientific corps, when the materials for supplying places have to be formed. But when, as in our circumstances, we have abundant officers, properly educated, experienced in its duties, and who, in fact, are now performing them, such a course cannot be advisable, but on the supposition that a full organization is not now wanted. As we are already obliged to employ more than the organization contemplated, this supposition cannot be well sustained; and believing as I do, the whole number are wanted, I have considered it the better course at once to submit a correct plan to your consideration.

It has been previously observed that the present corps consists of one lieutenant colonel commanding, five majors, four captains; to which are attached twenty six lieutenants of artillery and infantry, thirteen civil engineers.

The plan proposed adds a colonel to the corps, takes away one major, and from the lieutenants and the civil engineers takes six captains, ten first, and ten second lieutenants.

I have hitherto confined myself to an exposition of the kind of organization which now exists for topographical duties, its defects and inconveniences. Although many of the advantages of the modifications proposed are to be inferred from these, yet it may be well to state a few of the important public services which this corps has to perform, but to which, from its present defective organization, its attention has been applied but imperfectly.

Heretofore its duties have been principally directed to surveys for the defences of the posts and harbors on the Atlantic, including the water approaches to the positions to be fortified.

These surveys generally embrace some extent of coast as well as of inlets, and from the facts which have to be collected, constitute also very valuable, but rather limited, charts for navigation; but the land approaches to these positions remain yet to be surveyed.

Surveys of our harbors and of our rivers on the coast, with views to their improvement, and also to obtain more accurate charts of them than now exist. Although much has been done under this head, yet the greater part of our coast, and particularly from the Delaware, south, has yet to be attended to. These surveys, from valuable details, to be introduced in the great survey of the coast now being made, and which, with a proper understanding with the principal of that survey, may be introduced into his charts with great facility.

Surveys of the harbors and shores of our western lakes. It is only some of the principal harbors of these lakes to which the attention of the corps has yet been directed; those affecting the present lake navigation, and requiring immediate improvement. The connecting links between these harbors, the inlets of a secondary class, and the rivers which empty into them have hitherto received but little attention. Our imperfect organization and limited numbers were embarrassments to the activity and extent of our operations, which could not be overcome.

Surveys for common roads, rail-roads, and canals. Although these may be considered as purely of a civil character, yet a finer school of practice than they furnish for the topographical engineer, cannot well be imagined. He obtains on these duties expertness in the use of instruments; the habit of investigating the resources of a country, commercially, morally, and physically; its supplies in provisions, timber, metals, and means of construction; its population, and the best means by which it can be commanded in cases of emergency; its military aspect, hilly, level, or mountainous, and the various roads which intersect the path of his survey. While he is, therefore, apparently engaged on an object ostensibly of mere profit to its undertakers, he is perfecting himself in the practice of his profession, acquiring exact and persevering habits of investigation, improving his *coup d'œil*, and gathering the most valuable information in relation to the capabilities of self-defence of the locality of the survey, and its ability to aid in the defence of other parts of the country.

Surveys of the inland frontiers of our Atlantic and Western States. Singular as may be the acknowledgement, yet it is nevertheless the fact, that this highly important service has hitherto received but little attention. It embraces not merely a geographical knowledge of the frontiers named, but accurate topographical surveys of the vicinities of all our western posts; of the best routes for roads of communication between the posts and with the interior, for supplies and assistance. We have hitherto been able to direct but very feeble efforts to these important objects. The fault is not that of this bureau, but of the inadequate means placed at its disposal. Although there is an annual appropriation of twenty-five and sometimes thirty thousand dollars for surveys, yet, as considerably more than half of this is required for the salaries of the civil engineers, it leaves but a small portion for the expenses of surveys. This small portion is generally absorbed in the execution of those surveys directed to be made by resolutions of Congress, and of some parts of our sea-coast; the latter being a continuation of the surveys directed some years since in reference to a regular digested system of sea-coast defence. We are, therefore, left without the means of bestowing our efforts on the western frontier; and the position of appearing to neglect so important a duty, in which this bureau has been placed, is shown, by the foregoing remarks, to have been beyond its power to obviate.

Should the organization proposed be adopted, it will leave the whole appropriation for surveys free from the deductions for the salaries now paid out of it, and the bureau may then place a brigade of officers on the western frontiers to commence the execution of those important duties. Should it not be adopted, it will be seen that the bureau will be as unable as heretofore to attend to them, unless a separate appropriation is granted, and which is asked, in order to meet the contingencies of the case, in the estimate now submitted.

The survey of the coast. It would be superflous to speak of the necessity of this survey, of its immense importance to our commerce and navy, and of its extensive influence over any system of defence for the Atlantic frontier.

Of the methods by which alone such a duty ever has been executed by any nation, or even can be correctly, the books are full; and from the same sources we may also draw the best conclusions, of the time, and means, and qualifications which such a labor requires. Applications have been made to this bureau for aid in officers, but it has been unable to furnish but one. It was a cause of serious regret, but beyond the power of this bureau to remedy, and only in the hands of Congress by legislative action.

We have but one school in our country which may be considered as thoroughly mathematical in its course, the military school at West Point; and it is to this school only to which we can look for individuals sufficiently qualified to enter upon the duties of this survey, and justly aspire to a knowledge of its highest practical operations. I do not mean by this to say, that there may not be citizens who, of their own taste and own force of mind, are not equally

qualified; but these are only rare exceptions to a rule, the correctness of which will stand the proof of a comparison of the course of mathematical instruction and habits of study pursued at West Point, with those of any other school or college in our country.

Now, then, if the desire is that this great work should not cease with the life of the present highly informed gentleman who superintends it, and that, in course of time, we should have numbers capable of conducting it, and of executing any of its parts, we must give them the opportunity of acquiring the necessary practical knowledge, by placing them upon it. This can be done only by allowing to the corps within whose proper province such duties naturally fall, the necessary numbers. We can then place upon this duty a brigade of officers, from whose efforts may be anticipated the results of adequate education, facilities in practice, and of order and subordination of conduct.

The superintendence of constructions purely civil. There is no corps in our country to which the duties of a corps of *ponts et chaussees*, so properly belong as to the topographical engineers. It is so intimated in the report of the Military Committee of the last year; and it seems to me an unequivocal dictate of common sense to say that the corps which is employed in making the survey, digesting the plan, and forming the estimate of a work, is, from the very nature of the case, more fully embued than any other can be, with the consideration and unity of view which its construction involves, and, therefore, better qualified to superintend it. The subject does not seem to admit of much reasoning, but stands, like an axiom, upon the clear truth in its annunciation.

Having now exposed generally to your consideration the defects of the present organization of this bureau, its evils to the service, the remedy, and the general duties which the corps will be called upon to execute, I have, in conclusion, appended to this report the form of a short bill, which appears to me best adapted to effect the desired organization.

Respectfully submitted,

JOHN J. ABERT,

Lieut. Col. Topographical Engineers.

A BILL for the better organization of the Corps of Topographical Engineers.

Sec. 1. *Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled*, That the Corps of Topographical Engineers shall be organized and increased by regular promotions in the same, so that the said corps shall consist of one colonel, one lieutenant colonel, four majors, ten captains, ten first lieutenants, and ten second lieutenants.

Sec. 2. *And be it further enacted*. That vacancies created by said organization, over and above those which can be filled by the present corps, shall be taken from the army, and from such as it may be deemed advisable, of the civil engineers employed under the act of the 30th April, 1824, and that the pay and emoluments, to the officers of the said corps shall be the same as are allowed to officers of similar rank in the regiment of dragoons.

Sec 3. *And be it further enacted*, That the authority to employ civil engineers in the act of the 30th April, 1824, and the authority by law for the employment of the present Corps of Topographical Engineers be, and the same are hereby, repealed, after the passage of this act; and that all letters and packages on public business to and from the chief of the corps now authorized, be free from postage

Sec. 4. *And be it further enacted*, That the officers of said corps shall be subject to the rules and articles of war, and to such regulations in relation to their duties as the President may think proper to adopt.

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SCIENTIFIC.

FRENCH SCIENTIFIC VOYAGE.

NOTICES BY M. ARAGO, EMBODYING THE INSTRUCTIONS GIVEN TO THE OFFICERS OF "LA BONITE." *(Concluded.)*

[*Translated from "L'Annuaire," for the Army and Navy Chronicle, by J. M. G.*]

VISIBILITY OF ROCKS.

The bottom of the sea, *at a given distance from the vessel*, is much better seen, as the observer is more elevated above the surface of the water; thus, when an experienced commander navigates an unknown and rocky sea, he frequently goes to the mast-head to pilot his ship with greater certainty.

The fact seems to be too well established, for us to be able to point out any thing to our young navigators in a practical sense; but in following the indications which they will permit us to give here, they may be able to ascertain the cause of a phenomenon touching them so closely, and deduce from it, methods of perceiving rocks, more perfect than those which fortuitous observation has, until now, instructed them to use.

When luminous rays fall on a transparent surface, no matter what be its nature, a part traverse, and the others are reflected. The number reflected increases as the angle of incidence of the rays with the surface, diminishes. This photometric law does not less apply to rays, which, coming from a thin medium, encounter the surface of a dense body, than to those, which, moving in a dense body, fall upon the surface of separation of this body and a contiguous thin medium.

This granted, suppose an observer on board ship desires to see a rock a short distance from him—a submarine rock, distant horizontally 30 metres. If his eye is one metre above the sea, the visual line by which *the light emanating from* the rock can come to him after passing through the water, will form a very small angle with the surface of this liquid; but if, on the contrary, the eye is elevated, as to a height of 30 metres, he will see the rock under an angle of 45°. Now the interior angle of incidence, corresponding to the small angle of emergence, is evidently less open than that which corresponds to the emergence of 45°. We see then, the greatest reflections take place under the smallest angles, and consequently the observer will receive a portion of the light coming from the rock, as much greater as he himself shall be elevated.

Rays, proceeding from a sub-marine rock, are not the only ones which come to the eye of an observer, but, in the same direction, and confounded with them are found, rays of atmospheric light exteriorly reflected by the surface of the sea. If these latter were sixty times more intense than the former, they would totally mask their effects, and the rock would not even be suspected; for it results, from the often repeated experiments of Bouguer, that the most practised eye is not sensible to an augmentation of one-sixtieth of light. If there be a smaller proportion between the two lights, the image of the rock no longer entirely disappears, and will be but weakened. Let us now remember, that the atmospheric rays reflected to the eye, by the sea, have as much more brightness as the angle at which they are reflected is acute, and every one will comprehend, that two different causes concur to render a sub-marine object less and less apparent, in the same proportion that the visual line approaches the surface of the sea, viz: on one hand, the progressive and actual decrease in intensity of the rays which emanate from this object and go to form an image in the eye; and on the other, a rapid augmentation in intensity of the light reflected by the exterior surface of the waters.

Let us suppose the comparative intensities of two superposed pencils of rays are, as all tends to make us

believe, the only cause of the phenomenon which we analyse; and we may mention to the officers of "La Bonite" a means of perceiving sub-marine rocks, better and much more easy than that used by their predecessors. This method is very simple, and consists in looking at the sea, not with the naked eye, but through a plate of tourmaline cut, parallel to the angular edge of the prism, and placed in a certain position before the pupil.

Two words more, and the mode of action of the crystalline lamina will be evident.

Let us suppose the visual line inclined to the surface of the sea at an angle of 37°. The light which is reflected under this angle from the exterior surface of the water, is completely polarised. Polarised light, all philosophers know, does not traverse laminæ of tourmaline properly situated. A plate of tourmaline may then totally eliminate rays reflected by water, which, in the direction of the visual line, were mingled with the light proceeding from the rock; and efface them entirely, or at least, weaken them greatly. When this effect is produced, the eye placed behind the crystalline lamina, only receives a single species of rays, viz: those which emanate from sub-marine objects; and instead of two superposed images on the retina, there is no longer but one. The visibility of the object then, is notably facilitated.

The *entire and absolute* elimination of the light reflected from the surface of the sea, is only possible at the angle of 37°; because this angle is the only one at which there is *complete polarisation*; but under angles from 10° to 12° larger or smaller than 37°, the number of polarised rays contained in the reflected pencils and the number of rays the tourmaline can arrest, is yet so considerable, that the use of this means of observation would not fail to give very advantageous results.

By devoting themselves to the subject just proposed, the officers of "La Bonite" will enlighten a curious question of photometry; they will probably endow navigation with a method of observation which may often prevent shipwreck; and by introducing *polarisation* in the art of navigation, they will show by a new example, how much they are exposed, who incessantly welcome experiments and theories without actual applications, by a disdainful *what's the use?*

Water Spouts.

Does electricity perform any part in the production of water spouts? A clear and categorical answer to this question would possess great interest; therefore, whenever this phenomenon is presented, the officers of "La Bonite" should closely examine if thunder and lightning be there engendered.

Dip of the horizon.

The blue and well defined line, the apparent separation of the heaven and water, and to which mariners refer the position of heavenly bodies, is not the mathematical horizon; but the quantity which it is below, and which is called *the dip*, may be exactly calculated, since it depends only on the height of the observer above the water, and the dimensions of the earth. Unfortunately, we cannot so easily appreciate the value of atmospheric refractions, and therefore it is proper to state, that in the calculation of tables of dip generally used, there has no account been taken but for the *mean refraction*, corresponding to a certain state of the thermometer and barometer. Very skilful officers, as Capt. Basil Hall, Parry, and Gauttier, have determined by observation, the errors to which the navigator is exposed in conforming to the common rule. It has sufficed them to measure, (some with Wollasten's dip sector, others with ordinary instruments furnished with an additional mirror,) in the most varied atmospheric circumstances, the angular distance from a point in the horizon to the point diametrically opposed. Admitting, as it is nearly always permitted to do, that the state of the air and sea all round the observer, are the same, the difference of the distance measured and 180° is evidently the double of the real dip of the horizon. The half of this difference, compared with dip tables, gives the possible error of every angular observation of height made at sea.

In the arctic regions, the positive and negative errors, observed by Capt, Parry, have all been comprised between +59″ and —33″.

In the Chinese seas and East Indies, Capt. Hall found greater errors: from +1′.12″ to — 2′.58″. Captain Gauttier, in the Mediterranean and Black seas, found greater still: from + 3′.35″ to — 1′.49″. If we remember, that an error of a single minute in the latitude, would cause a change of position on the globe of about 2,000 metres, each one will percieve how important is this subject.

Examining with care all the observations of M. M. Gauttier, Hall, and Parry, we have found that, *the* CALCULATED *error of dip is only* POSITIVE, *and that this dip only surpasses the observed, when the temperature of the air is superior to that of the water.* As to the *negative errors*, they are indiscriminately presented in all comparative thermometric states of the sea and atmosphere, and without our being able to attribute these anomalies to any apparent cause. Here then, is a curious problem to resolve, equally interesting to the philosopher and navigator.

Divers Observations.

Rise of the coast of Chili.

In the month of November, 1822, and after an earthquake which had overthrown the cities of Valparaiso and Quillata, in Chili, a large portion of the country was found to be elevated from one to two metres above its former level. The earthquakes of 1834 appear to have been stronger than those of 1822. It is important, then, to examine whether it did not also cause a rising of the country as did the latter. A shore along which the tide never rises more than one or two metres, should furnish a multitude of marks, as banks of oysters, muscles, and other shell fish adhering to the rocks, by aid of which the question may be solved. A glance of the eye over the localities, however, would tell more than the necessarily vague indications we can here point out. Nevertheless, we believe it our duty to mention *the lake of Quintero, which communicated with the sea*, as likely to furnish incontestible proofs of the changes of level.

We would also recommend an examination of the hydrographic charts of Vancouver, Malaspina, &c., for it is scarcely probable the rising should have stopped at the shore, and that the bed of the sea has not participated in it.

The sudden or gradual rise of the soil appears destined to play too important a part in the history of the earth, for us to avoid requesting in a particular degree, the attention of the officers of "La Bonite" to this subject, and urge them to note all recent phenomena of this nature, of which they may receive information, especially on the coast of Peru. *

Earthquakes.

According to the generally received opinion in America, earthquakes should be more frequent in certain seasons than in others. Such a result, if clearly proven, would be of extreme importance for the philosophy of the globe. A complete collection of the journals which have been published in Chili during twenty years, if carefully examined, would certainly throw some light on this question. We will recommend this point to the commander of the expe-

* At the moment of sending this leaf to press, I have learned the contents of letters from Capt. Fitzroy, just read before a court martial assembled at Portsmouth, to try Capt. Seymour, for the wreck of the frigate Challenger, on the coast of Chili. These letters mention, that the currents near the port of Conception, have been changed since the earthquake of February, 1835, and that the island of Santa Maria has risen ten feet.

dition, and hope he will either execute the labor during the cruise, or furnish the materials on his return.

To adopt popular opinion hastily, is exposing one's self to introduce in *science*, and to its great detriment, a multitude of confused notions, based on phenomena, badly viewed, and worse discussed. To reject the same opinions without examination, we often reject the occasion of some important discovery. Therefore, I do not hesitate begging our young compatriots to seek, during their delays on the west coast of America, if the phenomena which are asserted to have accompanied the earthquake that destroyed *Arica* and *Saena*, on the morning of the 18th Sept., 1833, have been observed in other places. The phenomena in question, as related by M. John Reid, an English traveller, are as follows:

"The continual barking of dogs and braying of asses announced the approach of danger. The preceding day the atmosphere had been of a frightful immobility. Except a few light puffs coming first from one side, then another, *and which was as equally felt within as without the apartments*, we might say, during the entire day, (the 18th Sept.) the immobility of the air was complete at Saena.

"The shocks had left a great many empty bottles in the places which they occupied; but their corks were found scattered over the floor.

"None of these empty bottles had even been overthrown; whilst the full bottles, on the contrary, were thrown out of their places and broken.

"The varnish of a new table became so fluid, that the day after the shocks, the mahogany was as if surrounded by pendent glue.

"Large vases of potters earth, called jars, and containing water, were sunk in the earth; but the level of the liquid was maintained there at THREE or FOUR FEET only below the opening of the jar; nevertheless, a great portion of the water was thrown from these vases on the soil round about.

"At Saena it was remarked, that after every shock all the dogs of the city went to the first pool of water they could meet, to quench their thirst."

DECLINATION AND DIP OF THE MAGNETIC NEEDLE AT PARIS.

November 9th, 1835. At 1 h. 8′ P. M., we ascertained that the northern extremity of the magnetic needle pointed 22° 4′ to the west of the astronomical north.

July 3d, 1835. At 9 A. M. the dip was 67° 24′.

Extract of a letter from an officer on board the frigate Constitution, dated

CORFU, *July* 31, 1836.

MY DEAR SIR: We arrived here from Messina yesterday, all well. We left there this day week; and I have now but a few minutes, previous to the departure of the government steamer for Gibraltar, to write you a few lines. To-day, by appointment, the Commodore, with his suite, waited on the Lord High Commissioner. On landing, he was received by a guard of honor, commanded by the commander of the forces, in person, and saluted with eleven guns, which were returned of course by the ship. The Commodore's reception by Sir Howard Douglass and family was very distinguished. Afterwards he waited on the Greek President of the Council. This afternoon a Greek man-of-war came in, having on board Prince Mavrocordato, Minister to England. She saluted our flag with twenty-one guns, which we have just returned. Invitations to dinner from the officers and to Lady Douglass' soirees are coming in fast. Thus you see wherever we go, we are sure to be well treated.

The British frigate Belvidera sailed from New York on Friday last.

WASHINGTON CITY;

THURSDAY,..... OCTOBER 13, 1836.

EXPLORING EXPEDITION.—The London United Service Gazette of the 18th June copies the abstract of the report of the committee of the Senate, which originally appeared in the Globe, and on the succeedweek makes the following remarks:—

"The official exposition of the extent of the American whale fishery in the South seas and great Pacific ocean, which appeared in the United Service Gazette of last week, has, we learn, excited attention in the east as well as in the west end of this metropolis. Some vague notions respecting its importance and the rapidity of its progress were indeed entertained in various quarters, but no definite information on a topic so interesting appears to have been previously possessed. Independent of its immense increment as a leading ingredient in the acquisition of national wealth, it claims upon higher and more national grounds the scrutiny of statesmen, watchful that the country with whose destinies they are entrusted, should not be exposed to the risk of being paralyzed in the chief arm of its power, and shorn slumbering and unsuspicious of the attributes of its strength. However we may be disposed to rejoice in the onward career of the United States towards riches and greatness, it ought never to be lost sight of that when we cease to keep equal step with them, and are found to lag behind in the race, the foundations of national eminence are underminded and ultimately national safety endangered. It is in this sense that the committee of the American Senate appreciate the value of the whale fishery, and thus also that we should regard it."

After recapitulating the number of vessels and men, and amount of tonnage and capital employed, the Gazette adds:—

"The period is not yet unremembered when the whole of this vast traffic was in the exclusive holding of Great Britain; when we compare therefore the present with the past and our actual standing with that of our trans-atlantic brethren, there is cause for humiliation if not for apprehension.

"The whole amount of British shipping concerned in the whale fisheries appears by the official accounts to have been as follows, at the periods cited:—

In 1820	Ships 194	Tons 62,750
1825	138	42,736
1830	97	31,897
1834	107	31,161

"Of which the fishery of Greenland and Davis's straits occupied

In 1820	Ships 159	Tons 50,546
1825	110	34,751
1830	91	29,396
1834	76	24,955

"Leaving for 1834 no more than *thirty-one* vessels for exploring the vast repository of enterprise and treasure in the Pacific against 460 Americans. This is a contrast of no pleasant contemplation."

The increased importance attached to our growing naval and maritime interests, may be inferred by the fact that we find copied into the London United Service Gazette several official and other documents relative thereto.

Among others we may enumerate the synopsis of the report of the Naval Committee of the Senate respecting the exploring expedition.

An abstract of the report of the Board of Navy Commissioners, on the maximum amounts required for the navy.

A synopsis of the naval appropriations for 1836.

The bill to encourage the employment of boys in the Navy.

The bill to regulate the pay of the officers of the marine corps.

The bill to regulate the compensation of certain officers of the Revenue Cutter service, and

The bill reported by the Naval Committee of the House, to fix the Naval peace establishment.

[*For the New York American.*]

Mr Editor:—It is now, I believe, not less than three months since the passage of a law of Congress requiring the appointment of Commissioners for "laying out a Military Road" from the upper Mississippi to the Arkansas river, with the view to facilitating the communication between the military posts which are, and are to be, established on the borders of those territories which have been conceded to numerous and disaffected Indian tribes.

The importance of the subject will, I trust, be deemed an ample apology for inquiring if you have any knowledge who those commissioners are?—*whether they have entered upon their duties?—and if so, what progress they have made?* Janus.

We can furnish no answer to the above questions—though we are not unaware of the great importance of the construction of the road in question, particularly to the disastrous station of Fort Gibson—which, it will be remembered, was abolished as a military post during the last session of Congress. The reason assigned, as we learn, for keeping troops there at present is, that before they can be removed, another post must be established, which cannot be done, it is said, until the "military road" is made.

The site of Fort Gibson is liable to annual inundations, and during the time it has been occupied by troops, nearly 1100 officers and men have died there; mostly from the 7th infantry and the 1st regiment of dragoons. There is nothing in the appointments of the fort to counteract the pestilential influence of the climate—the quarters being the most wretched tenements ever used for human habitations. They are principally log huts, which have been built a great number of years, and from the effects of a damp atmosphere, are undergoing rapid decomposition; and thus adding to other poisonous exhalations, those from decaying wood. Of these fatal abodes there are not ordinarily more than half enough for assignment to officers and men, according to the *regular allowance of quarters*. These facts furnish ground enough for urging the completion of the military road, and for complaint of past delays, independently of the many other considerations which require it.

Perhaps the Army and Navy Chronicle may be able to afford some information on this point.—*New York American.*

The direct appeal made to us, in the closing paragraph of the foregoing article for information, has induced us to make inquiry therefor.

Gen. Atkinson was authorized some time since to appoint Commissioners for laying out the contemplated military road. Until that road is laid out, and sites designated for the military stations, no new work can be well commenced, for the accommodation of the officers and troops now, or recently, at Fort Gibson.

We are in hopes that some plan will be devised for the better accommodation of the troops on the frontier, and that something like a permanent system of forts and quarters will be adopted. We feel assured that if such were the case, the garrisons would be more healthy, and the service more agreeable. It is bad enough to be deprived of society, and still worse to be doomed to confinement in quarters that afford no protection either against the elements or an enemy.

The Government owes it not only to the inhabitants of the frontier, but to the various tribes of Indians whom it is about placing there, to establish a line of military posts, which will suffice as a protection to our own citizens and a check upon the savages; and as it has induced the tribes to believe that they shall not be disturbed in their new homes by the advances of the white population beyond our own borders, the establishment of such a line of posts would be an earnest that we are sincere in our declarations.

We believe that a report is now on the files of the War Department, which recommends a regular plan of *permanent* fortifications—such as stone or brick—for the defence of the frontiers; works that will afford ample accommodations for the officers and soldiers, and for the horses and other appendages which properly belong to a military establishment; also small arsenals and armories to each post, to contain at all times arms and ammunition sufficient for the use of the garrisons, and for arming the militia of the vicinity whenever they may be called into the service of the United States.

The Commissioners of the Navy returned to Washington on Monday last. While in Boston, it is said, they directed that the U. S. ship Columbus should be taken into dry dock and repaired.

Lieut Julius A. d'Lagnel, of the second regiment of Artillery, will be appointed Captain of Ordnance, in the place of Captain R. P. Parrott, whose resignation takes effect at the close of the present month.

A detachment of marines, under the command of Captain McCawley, left Washington on Monday, in the steamboat Columbia for Norfolk, intended for the North Carolina, 74.

Messrs. Grivot & Paige, of New Orleans, are authorised to receive subscriptions to the Army & Navy Chronicle.

ARRIVALS IN WASHINGTON.

Oct. 6—Capt. W. M. Fulton, 2d Drag. Mc C. Young's.
8—Capt. W. E. Cruger, 5th Infy. Gadsby's.
10—Lt. H. B. Tyler, M. corps, Capitol Hill.
11—Capt. J. W. Ripley, Ordnance, Fuller's.
Lt. W. Maynadier, 1st Art. Mrs. Eveleth's.
Dr. E. Worrell, Fuller's.
Capt. J. A. Philips, 7th inf. Mrs. Fletcher's.

PASSENGERS.

New York, Oct.—per steampacket Wm. Gibbons, from Charleston, Lieut. A. A. Humphreys, late of the army.

Oct. 10—per ship Quebec, for London, Gov. Cass, Minister to France, and family; C. E. Anderson, Secretary of Legation; and Lieut. J. H. Prentiss, of the army.

Charleston, Oct. 1—per steampacket South Carolina, from Norfolk, Dr. Southgate, of the army, and Lt. D. N. Ingraham, of the navy.

Norfolk, Oct. 9—per steampacket S. Carolina, from Charleston, Lts. A. Lewis and J. Noble, of the navy.

EUROPEAN MILITARY RESOURCES.

We have selected from a file of the London United Service Gazette, statistical accounts of the population, debt, income, and military resources of several of the European powers. They will furnish food for contemplation for our own officers, as well as for the curious of all classes. The account of Prussia being of some length will form an article by itself for a future number. We commence with

ENGLAND.—The British army is widely distributed, and serves in every description of climate—in Europe, Asia, Africa and America.

Notwithstanding the connexions which civilians must have, serving in this army, we seldom find the military profession, the services of its members, or the stations in which the corps are serving, excite the interest which might naturally be expected in a society so constituted. We have often wondered at the utter ignorance betrayed in all circles, not military, of the composition of our army—not to speak of the distribution of it. For the edification of our *civil* readers, we subjoin a statement of the distribution and services of our army up to the latest dates:

1st. The cavalry and horse artillery, in time of peace, serve within the United Kingdom only, with the exception of four regiments of light dragoons which serve in India. Of these, the 11th and 13th have been in that country since 1819, and the 4th and 16th since 1822.

2d. The foot artillery serve by detachments, for periods very seldom longer than five years, in all our colonies except India, from the protracted and enervating service of which distant country, we rejoice that this invaluable portion of the army is saved.

3d. The foot guards, during peace, also serve at home, and with the exception of one battalion, which is in Dublin, never out of England.

4th. The regular infantry consists of 102 batallions, including five regiments of fusiliers; four battalions of riflemen, and eight regiments of light infantry.—These regiments are distributed as follows:

In the East Indies there are 21 regiments, including a regiment, the 20th, which is supposed to be on the passage home. Of the regiments in India, there will remain, after the relief of the 20th, *three* which have been serving abroad since 1819; *two* since 1821; *five* since 1822. Hitherto the service of regiments in India has been from 20 to 25 years, and in no instance under 18 years. This is, consequently, a portion of our army, of which very little is known, and regarding which not even the military authorities seem to care—losing sight of 20,000 soldiers, and following the old rule of "out of sight, out of mind."

In the West Indies there are 16 regiments; or, properly speaking, the head quarters of 16 regiments, each consisting of six companies only—as four, out of the ten companies of which a regiment is composed, are left in the United Kingdom under the title of a depôt. This gives a relief to officers and men, who may return sick or on leave from abroad. The system seems to work well, though occasionally abused.

In the Mediterranean, there are fifteen regiments.

In the Mauritius, three regiments.

In America, eight regiments.

In Ceylon, five regiments, including one ordered home.

In New South Wales, five regiments, including one on passage out.

At Cape of Good Hope, four regiments, including one ordered home.

At St. Helena, one regiment.

All the regiments, as above enumerated, are of six companies only, and their depôts of four companies each are serving in the United Kingdom. Thus all these corps have a great advantage over those which serve in India, as they have nine companies abroad, and leave only a *skeleton* company under an officer to recruit. Add to this that the regiments in India serve twenty years abroad—the regiments elsewhere only ten years. The remainder of the infantry regiments serve in the United Kingdom, but are sent abroad to relieve others, after remaining about five years at home.

5th. The Colonial corps are two regiments, called "West India regiments," composed of people of color, officered by Europeans. One regiment for duty in Ceylon, composed of blacks, but officered by Europeans. The Royal African corps, similarly constituted, and stationed at Sierra Leone. The Newfoundland veteran companies, the Royal Malta regiment for duty in that island, and the Cape mounted corps stationed in that colony.

Thus, of the 102 battalions of infantry, exclusive of Colonial corps, 79 are on foreign stations, or on passage to or from them. Well, indeed, may the British army be styled by Continental nations "a Colonial army."

SPAIN.—The population of Spain is estimated at 14,000,000.

The debt is about £160,000,000.

The revenue, £7,150,000.

The Army—the Royal Guard. First Gardes des Corps.

4 Squadrons of Guards, heavy dragoons.
1 do light cavalry.
1 company of halberdiers.

Second, Infantry
4 regiments 2 battalions each of grenadiers.
2 do of 3 do of provincial grenadiers.
2 do of chasseurs.

Third, Cavalry, 1 regiment of carabineers.
1 do of dragoons.
1 do of lancers.
1 do of hussars.

Fourth, Artillery.
1 brigade of artillery, foot and horse.

Army of the line—Infantry
13 regiments of infantry of 3 battalions.
4 do do of 2 do.
6 do of light infantry of 2 do.
3 Swiss regiments of 2 do.
1 discipline do at Ceuta of 3 do.
27 regiments and 88 battalions.

The battalion is composed of six companies, one of grenadiers, one of voltigeurs, and four of fusiliers.

Cavalry.
5 regiments of heavy horse.
7 do of light do.

Artillery and Engineers.
4 regiments of foot artillery.
1 do of light do.
2 squadrons.
5 companies of miners.
2 battalions of sappers, &c.
10 companies of veterans in garrison.

Total effective in 1834.

Royal Guard	5,604 men
Infantry	39,652
Cavalry	7,859
Artillery	5,458
Sappers	756
Total	59,329

The militia, not well organized, is calculated in actual force at 33,000 strong, consisting of 42 battalions of 6 companies each. These results are far from agreeing with the ministerial report made to the Cortes by the Secretary for War in the same year. He stated the effective force of the army, perfectly armed and equiped at 200,000, without comprising the Royal Guard, 14,000 strong, and that the Urban Guard exceed in number 100,000. Political motives led doubtless to this gross exaggeration; but it is

probable that the armies of operation and in garrison may now amount to about 120,000 men.

Military Establishments.—There are cannon foundries at Seville and Barcelona; manufactories of fire arms at Oviedo, Squalada, Placencia and Toledo.

NAVY.—The navy and naval establishments are in a state of lamentable decadence.

3 ships of the line, 1 of 80, and 2 of 74 guns.
4 frigates.
18 corvettes, brigs, and golettas.
Totol 25 vessels of war.

Cadiz, Ferrol and Carthagena are the three great dock-yards and royal marine ports of Spain, and the ordinary stations of the navy. The arsenal of Cadiz is at Caraccas, separated from the Isla de Leon by the canal of San Pedro.

PORTUGAL.—The Population of the Kingdom of Portugal, according to the last returns, amount to 3,372,940.

The national debt,	£6,400,000	
The loan just contracted,	900,000	
		£7,300,000
The revenue being,		2,200,000

So that the annual interest absorbs nearly one-sixth of the receipts of the Exchequer. On the various loans contracted since the change of Government—that is, since 1832, Portugal has never from her own means remitted one pound of interest. The dividends upon the old loans have invariably been provided for out of the proceeds of new ones contracted.

The provisional organization of tbe army, as decreed in 1834, was as follows:

Staff major generals and subordinates,	1,372 men.
Twelve regiments of infantry of the line,	15,720 do.
Four regiments of light infantry,	2,936 do.
Artillery and special corps,	3,390 do.
Six regiments of cavalry,	3,000 do.
Total,	26,418

The National Guard of Lisbon consists of twenty battalions, of which the effective force is rated at 15,000 men.

Military establishment.—Arsenal and manufacture of arms at Lisbon.

Marine.—The Portuguese fleet is composed of—

2 ships of the line.
10 frigates.
28 vessels of an inferior order.

40 vessels.

The only naval arsenal and dock yards are at Lisbon.

HANOVER.—The Kingdom of Havover contains a population of 1,662,500 inhabitants.

Its public debt amounts to,	£3,560,000	
Its revenue (6,065,020 thaler,)	1,000,000	
Budget of War Department, (1,201,500 thaler,)	188,000	
Field marshals, for ornament we presume, number,	2	
General of Infantry,	1	
Lieutenant Generals,	3	
Major generals,	11	
General staff officers,	15	
Engineer corps and two companies of pioneers,	198	
A brigade of artillery, composed of two squadrons of horse artillery, two battalions of seven companies of foot artillery, one company of artificers,	1,368	
One regiment of heavy cavalry, three of light dragoons of six squadrons,	3,340	
Two regiments of foot guards, two of light infantry, twelve of the line,	15,580	
Total,	20,501	

The regiments have only one battalion of five companies.

Men discharged in the year and not replaced, 1,140

Total, 19,361

Of this number, numerous leaves of absence are given for temporary poriods.

The cavalry and artillery are recruited by voluntary engagement, as well as by forced enrolment.

The infantry by lot among the young men who have attained their twentieth year. The length of service is five years in the guards and six in the others.

There is a manufactory of arms at Hertzburg; a foundry for cannon at Hanover; a powder manufactory at Hertzen.

A military academy exists at Stade for completing the instruction of officers and cadets who have already served several years.

Promotion to the rank of major is regulated according to capacity as proved on examination. This examination embraces the theoretical and practical requirements required for the science.

THE TURKISH EMPIRE.—The population of Turkey in Europe is, 8,800,000
Turkey in Asia 12,500,000

Total, 21,300,000

The national debt, from 6 to	£8,000,000
Revenue, according to Balbi,	14,400,000

Koshrou-Mohammed-Pacha, of three Tails, Generalissimo of the regular troops.

Khalil-Rufat-Pacha, of three Tails, Son-in-law of the Grand Segnior, Grand master of the artillery.

Mohammed-Tahir-Pacha, of three Tails, Grand Admiral.

Achmet-Foozi-Pacha, of three Tails, General of Division of the Imperial Guard.

Achmet-Fethi-Pacha, of two Tails, General of Division of the Imperial Guard.

Mohammed-Wacif-Pacha, of two Tails, General of the army of the line.

Zeinel-Abeddin-Effendi, Grand Judge of the army of Roumelia.

Melek-Pacha-Zadé-Abdulkadir-Effendi, Grand Judge of the army of Anatolia.

Abdurahman-Nafiz-Effendi, Treasurer General of the regular army.

Sali-Bey-Effendi, Controller of Expenses of the regular army.

Elhadgi-Ibrahim-Saib-Effendi, Intendant General of artillery and of bombardiers.

Mohammed-Emin-Seid-Effendi, Director General of the military materiel.

Mohammed Said-Muhib-Effendi, Inspector General of the imperial powder manufactories.

Hadi-Effendi, Director of the Victualling department.

Abdul-Halim-Effendi, First Architect of his Highness, Intendant General of the imperial marine.

The army is composed of regular and irregular troops.

Regular troops—Infantry.

4 regiments of the guard,	10,000		
20 do. of the line,	24,000		
Battalions of instruction dispersed in the provinces,	12,000		
			46,000
Cavalry, 4 regiments of the guard,	1,500		
2 do of the line,	1,000		
			2,500
Artillery, of the guard,	300		
of the line,	1,200		1,500
		Total,	50,000
Irregular troops, infantry,	120,000		
cavalry,	50,000		170,000
Effective of the army,			220,000

The irregulars are armed and equipped according to the ancient Turkish system. By a firman published in the Moniteur Ottoman, of the 30th August, 1834, the Sultan orders the formation of a national and and regular militia, under the denomination of redifi-mansoureh; one battalion per district is to be enrolled of young men from 23 to 32 years of age. The regular militia is to be armed and equipped uniformly, and at the charge of the State; but the arms and equipment, except the clothing which the militia man is to keep under his own care, shall be laid up in the public depôts and only to be delivered out on the days of training and service. The month of September in each year is appointed for calling out the militia.

The greater part of the regular troops, and particularly the guard, do duty at Constantinople, and in the chief strong places of the empire. The irregular forces are stationed on the frontiers; and some corps are in garrison in the less important fortified places of the interior.

Military School.—The Sultan, convinced that the ignorance of general and other officers in the art of war, has been the great cause of the want of success of the Ottoman arms, has decreed that the institution of Galata-Serai, in which the Icoglans or pages practised their exercises, should be converted into a military school.

The Marine.—The arsenals and dock-yards, as well as every thing embracing the materiel of the navy, are all to be found within the port of Constantinople, which is, perhaps, the only one in the world, capable of containing in its vast enclosure, every thing necessary for the service and equipment of a numerous fleet.

The fleet.—The Mahmoud, of 120 guns.
Selim, of 80 guns.
Six men of war, of 74 guns.
10 frigates, from 36 to 60 guns.
13 corvettes, from 18 to 30 guns.
1 brig of 12 guns.
2 steam vessels.

34 total vessels of war.

All the guns of the Ottoman fleet are cast in brass. Some of these ships are old and unseaworthy, but the Mahmoud is remarkable for its gigantic proportions. Before the Greek revolution, the crews of the marine were composed of Ipsariots, Spezziots, and Hydriots; but since, a corps of regular seamen has been organized.

Grand Duchy of Saxe Weimar.—The population of this duchy amounts to 238,672 souls.

The debt is £640,000.

The revenue is 200,000.

Army—1 regiment of infantry.
1 detachment of hussars.

Federal contingent for the army of the confederation, 2,100 men.

From the Colombo (Ceylon) Observer Dec. 24.

The U. S. Ships Peacock and Enterprise.—On Monday afternoon, about half past four o'clock, the Right Hon. the Governor, attended by his staff and some of the principal officers of the garrison, paid a visit to the Commodore on board the U. S. Ship Peacock, where he was received with a salute of 17 guns, which was answered by a like number from the saluting battery of the fort. After leaving the Peacock, his excellency visited the U. S. Schooner Enterprise, where he was received with a similar salute. The latter compliment not having been anticipated, the royal artillery had quited the battery; and as it would have been too late that evening, 17 guns were fired from the fort at sunrise next morning.

DOMESTIC INTELLIGENCE.

THE LATE CAPTAIN CAHOONE.

Newport, R. I. *October* 6, 1836.

At a meeting of the officers belonging to the Revenue Service of the United States, at Newport, in the Rhode Island District, held at Hassard's Hotel, the 1st of Oct. 1836, Capt. W. Foster was appointed Chairman, and Capt. William Gatewood, Secretary.

Whereupon it was *Resolved*, That we have learned with deep regret the decease of Capt. JOHN CAHOONE, late commander of the revenue cutter Vigilant, on this station, and senior officer in the cutter service.

Resolved, That we will attend the funeral ceremonies of Capt. Cahoone to-morrow at 4 o'clock, P. M. in our appropriate uniform, as United States' officers.

Resolved, That as a further mark of our respect for the high official and moral character of the deceased, we recommend to our brother officers in the service, to wear crape on the left arm for thirty days after this notice, and that the commanding officers of all the United States' Cutters will cause the colors to be hoisted half mast, upon receiving intelligence of this lamentable event.

Resolved, That a copy of these resolutions be sent to the family of the deceased, in testimony of our sympathy and condolence for the afflicting bereavement occasioned by the death of Capt. Cahoone, and that another copy be published in all the newspapers printed in this town.

The above resolutions were unanimously adopted, and ordered to be printed.

WINSLOW FOSTER, *Chairman.*
William Gatewood, *Secretary.*

Honors to the Dead.—Minute guns were fired from the revenue cutter Vigilant, in this harbor, while the funeral procession moved to the grave of Capt. John Cahoone, with his remains on Sunday afternoon last.—*Herald of the Times.*

Second Regiment U. S. Dragoons.—We learn, with great pleasure, that the recruiting service for this corps, established in this city, under the charge of our esteemed fellow-citizen, William W. Tompkins, one of the lately appointed captains in said regiment has been eminently successful. Capt T. has completed the enlistment and organization of the company to be under his own immediate command, and has already brought them into a high state of discipline. The company is stationed at present at Fort Columbus, Governor's Island. We are informed by those who have seen the corps, that it is composed of the finest set of young men, many being well educated and connected. Our citizens will have an opportunity of seeing them somewhere about the 20th inst. when Capt. T. purposes to parade his men as an infantry company. The battalion is not to be mounted until its arrival at the south, where it is destined shortly to go for service.

Capt. T. is also superintending the recruiting of another company for the same regiment, one half of which is already filled. We trust that we shall have a good account of this regiment, during the approaching fall, in Florida.—*Yew York Times.*

The Army.—The St. Augustine Herald of the 22d ult. has the following extract from a letter of Gen. Call, to an officer of the army:

"Amidst all the failures and disasters of the present Indian war, it is highly gratifying to find, on every trial, no matter how unfavorable the circumstances, the high character of our army is fully sustained."

The same paper says:—"A U. S. soldier, named Wright, belonging to Dimick's company, was tried at the present term of the Superior Court, and found guilty of the murder of Orderly Sergeant Williams, of this company, in April last.—*Savnanah Georgian.*

SOMETHING NEW.—We have lately examined a new instrument for measuring soundings at sea. It is an English invention and is patented. It may be called the patent hydraulic Deep-sea Lead. It is graduated like a barometer, and indicates the depth of sounding with the greatest precision. The advantage of this instrument is, that soundings may be had without slackening sail. We would call the attention of ship owners and masters to this valuable invention, the superior utility of which must be recognised by every sailor. It may be seen and procured at the ship chandlery store of Mr. Charles Ware, No. 77 South street, corner of Fletcher At the same store may be seen *Transparent Compasses*, a very useful American invention, which recommends itself to every observer.—*New York Express.*

SAVANNAH, *Oct.* 2.

LATER FROM FLORIDA.

MOVEMENTS OF TROOPS.—Company B, of the 4th infantry, under the command of Lieut. B. Alvord, embarked at Key West on the 25th ult., and arrived at St. Marks on the 30th, destined for Suwanee Old Town, where the 4th regiment of infantry is stationed.

ST. AUGUSTINE, *Sept.* 22.—The communication between Garey's Ferry and Picolata is interrupted. It is considered extremely dangerous to send expresses over land, and there has been no communication by water for some time.

There are at this post, in hospital, 117 sick and wounded U. S. troops, and 29 in quarters, among them several officers.

There have been no deaths during the past week, and we are informed they are generally doing well.

We are happy to learn from a high source that the sick troops at Picolata are all doing well. There are no new cases, and the sick report is decreasing.

By the steam packet John Stoney, Capt. Freeland, from Jacksonville, we have received the following letter and slip from our attentive correspondent.

Extract of a letter to the editor of the Georgian, dated

"JACKSONVILLE, (E. F.) Sept. 28.

"Gov. Call, with between 1800 and 1900 men, consisting of the Tennessee volunteers, and the citi zen soldiers of Middle and West Florida, was to cross the river Suwanee on Monday or Tuesday last. The Governor intends marching immediately for the nation.

"Gen. Jesup, with 1000 regulars, and 600 Indians, is either at Tampa Bay, or the mouth of the Withlacoochee.

MOVEMENTS IN GEORGIA.—It is stated, says the Federal Union, of the last of September, that General Jesup has ordered Major Dearborn, with about two hundred United States regulars, into Lowndes county, for the protection of that and the surrounding country against the depredations of Indians. It is anticipated, that when operations shall be renewed in Florida, parties of Creek Indians, perhaps accompanied by their Seminole allies, will return through our southwestern counties to their ancient homes; and this force is designed, we learn, as a preparation for such a state of things.

Correspondence of the Fredericksburg Arena.

FORT HEILEMAN, *Flor., Sept.* 27.—There are now at this post 150 men only fit for duty, out of eleven companies. Of ninety men which composed the company of dragoons to which I am attached, there are only ten able to do duty; nor will they be able to take the field for several months to come, being entirely broken down. Instead of being able to make a summer campaign, the men are unable to stand the climate when stationary;—instead of being able to advance into the enemy's country, we have had to retrogade. Micanopy was abandoned, in consequence of its breaking down the men escorting wagon trains laden with provisions. We have had to fall back upon Black Creek, to which place provisions can be brought in steamboats.

General Scott has been censured for not carrying on the campaign during summer. It would have been absurd to attempt it. He did all that any General could, under the same circumstances. The nature of the country was the great cause of his failure. He had to contend against the obstacles which nature threw in his way, and not against the Indians, who hover about, deliver their fire, and fly off, without the possibility of getting at them. They have trails through their immense hammocks, with which they are familiar, and in this way they harass us with impunity. General Jackson never advanced into these hammocks, he never penetrated farther than the Suwanee river, and he had friendly Indians who could ferret out the hostiles, so that he could get at them. A new campaign is about to open, but no one can anticipate the result. There are about 3000 men now in the territory. General Call has advanced as far as the Suwanee with the brigade of Tennesseans, and the militia of West Florida, making 1900 men. Gen. Jesup is advancing from Tampa Bay, with about 800 regulars, and 600 Indians; while Major Pierce, the commanding officer at this fort, will advance soon with about 200 regulars, and form a junction with General C. at Camp King.

From the Jacksonville Courier, Sept. 29.

The Tennessee volunteers, with Governor Call at their head, are at Suwanee Old Town. Gen. Jesup, with the U. S. troops and Creek Indians, is at Tampa or on the Withlacoochee. The troops in this section, under Major Pierce, are expecting orders daily to march. Col. Downing, aid to Gov. Call, will, with a proper escort, reach this place Sunday next, on his way to join the commander-in-chief. Warlike stores are being deposited at different points. The work goes bravely on.

On Tuesday last Colonel Warren reached this place from Newnansville, on a furlough of a few days.

From him we learn that on the 22d inst., the Indians took from Maj. Mapes, Paymaster U. S. A., his horses, while at Fort Milla on his way to Newnansville. They also took several belonging to his escort, a part of Capts. Brown's and Parish's companies of Florida volunteers, making in all twelve horses taken. On the 23d Major M. reached Newnansville, and was sick of the bilious fever.

Col. Warren left that post the 25th. He saw no Indian signs on his way, and supposed the enemy were apprised of the approach of the troops which are on their way to their strong-holds.

Gov. Call, with between 1800 and 1900 men, consisting of the Tennessee volunteers, and the citizen soldiers of Middle and West Florida, was to cross the river Suwanee Monday or Tuesday last. The Governor intends marching immediately for the nation.

Gen. Jesup, with 1000 regulars and 600 Indians, was either at Tampa Bay or at the mouth of the Withlacoochee.

Gov. Call has made a requisition on the States of Georgia and South Carolina for volunteers or militia to be sent immediately to Florida. He expects to have upwards of six thousand men in the field in twenty days.

Col. Warren says nothing has been seen or heard of the Indians since the victory which the men under his command gained near Newnansville. This will be considered one of the most important and brilliant achievements of this war, when its victories and defeats become matter of history.

CORRESPONDENCE OF THE ARMY AND NAVY CHRONICLE.

St. Mark's, Flo., Sept. 30.

"Great sickness, I understand, prevails at Suwanee Old Town. Maj. R. M. Sands died there on the 12th instant. Gov. Call has marched from that post with his command, and will aim to cut off the Indians now attacking the northern frontier. A steamer is in this harbor having on board 120 sick Tennesseans, from the Suwanee bound to Pensacola. They were too anxious to march into the field, and too many were allowed to leave Tallahassee; the result is that they are prostrated at the first march. They have stout hearts, and will do much if they have good health. Heaven grant us success!

SELECTED POETRY.

From the New York American.

THE RESTLESS ONE.

By Lieut. G. W. Patten, U. S. A.

She knew his brow was clouded,
And she leaned it on her hand,
And gently woo'd him to her side,
With breath like breezes bland.
But he gazed upon a banner,
As it floated on in pride,
And while he marked its gleaming stars,
They won him from his bride.

They lured him from the presence
Of the cherished and the true,
No more to gaze upon her face,
Her gentle step pursue:
And yet through life's long pathway,
When the aisles of hope grew dim,
Bright as a deed of glory
Was the smile she had for him.

She knew they must be parted
Ere they had scarcely met;
And faster tear drops dim'd her eyes,
That none but hers were wet.
And she wore a spell of sorrow,
Which she learned unto her lute;
But the trumpet had a deeper charm—
And the lover's ear was mute.

He left the song of beauty,
For the music of the plain;
The lowly breathing of the lyre,
For pæans o'er the slain;
And yet that lyre sweet chorded,
That voice like mock bird's tone;
For him was garnered all its notes—
For him it sang alone.

Time was, love's smile might conquer,
What the sword could ne'er disarm,
When strong was woman's lowly prayer,
As the might of the mailed arm.
But the magic spell is over,
And the syren voice is dumb;
While love forgets his gentle lute,
And he strikes the doubling drum.

THE ARMY IN THE FIELD.

By Lieut. G. W. Patten, U. S. A.

I never see a shadowy plume
Upon a soldier's crest,
But I think of ye, my gallant braves,
Amid the far South West.
I never hear the pipe's shrill notes,
Amid the city's hum,
But I see your serried columns form,
Where rolls the roaring drum.

A lengthened trail ye tread, my braves,
And difficult its sign:
Thro' hammock, and thro' everglades,
By marsh and tangled vine.
Your homestead is the wilderness,
Your canopy the sky,
And the music which ye love the most
Lives in the battle cry.

They little know who lightly dwell
Upon the griefs ye bear;
The task and toil, Oh! weary ones,
Which ye are doomed to share.
'Tis yours to quench the feudal fire,
The elements prolong,
To hunt the footsteps of the fierce,
To wrestle with the strong.

To scorch beneath the vernal sun,
Amid the hurried rout,
To scare the vulture from his feast,
Where the foremost steed gave out;
To seek in vain for gushing spring,
Upon a thirsty waste,
To sink amid the mazy wood,
With the homeward path effaced.

'Tis yours to scorn what few deride;
Attempt where all may fail;
To stem the raging of the tide,
The rushing of the gale:
And when your hearts of lava rock,
Heave like the mountain warm,
'Tis yours to roll unto the shock,
Like the torrent and the storm.

And oh! 'tis yours at midnight hour,
Upon the guarded plain,
To dream of smiles, far, far away,
Ye ne'er may see again.
To vanquish hope, to purchase fame,
With blood of foe unseen;
Then find a grave without a name,
Beneath the hammock green.

From the Zodiac.

ANECDOTES OF NAPOLEON BONAPARTE.

(Never before published.)

In his campaign against Austria, the First Consul received every day during his march against Ulm, the bitterest complaints that the *commissaires de guerre* were not exact in their distributions, and did not give to each regiment either the prescribed quantity or quality of provisions. He was highly excited, and exclaimed at various times, "*Ah les voleurs, les voleurs, j'en ferai un example!*" (Oh, the robbers, the robbers, I shall soon make an example of them.)

In his first campaigns as Consul, and even as Emperor, Bonaparte established his head quarters in palaces or large houses, surrounded by a numerous guard, and a brilliant retinue. General Alexander Berthier, as major general of the staff, marched with a strong escort in advance to provide beforehand a comfortable lodging, and other accommodations for his new master. Berthier, of a feeble and servile character, was very zealous to please his superior, by compliance with all his frequent whims, and suffered many times severe reprimands, given even in our presence. Berthier chose, therefore, as often as he could, to procure for himself a separate lodging, and was never better pleased than when he could obtain a few moments of respite and rest. And these even, he could not enjoy in quietness, as I frequently observed him rising from his field bed on hearing the least noise, and asking us in an anxious tone, "has the First Consul called me?" His was truly the life of a wretched slave, surrounded with all the brilliancy of rank and power!

One day we arrived at a small German town, Reutlingen, where we were to pass the night. The rain had continued to fall upon us during the whole day, and every one of us was completely drenched; when Bonaparte perceived at a distance the towers of the churches of the place, he spurred his horse, impatient to arrive, and perceiving a sentry before a very small

and poor looking house, he stopped, alighted, and went in. He surprised Berthier seated before a comfortable fire, who seeing the First Consul, jumped from his arm-chair, and excused himself by stammering out that he had not expected him so soon, and explaining that this was not his (the Consul's) prepared quarters, which were in a large house on the public square, where he would be a thousand times more comfortably and *honorably* lodged than in this miserable hut. "In whose lodgings am I here?" asked Bonaparte. "It is my humble abode," answered Berthier, in an embarrassed manner. The Consul looked round, and with a smile said, "Well Mr. le Major General, we will change—I will remain here, and go you to my quarters. Send for my maps and papers, and remove this table nearer to the fire." This done, after a very considerable bustle, to the great annoyance of us all, Bonaparte continued until the night was far advanced, working, wet as he was, in his cabinet.

The next morning the army was in full march, and the weather clear. But the rain had so much affected the roads, that the artillery, baggage, &c., could only advance with great difficulty. The Consul, anxious to gain the advanced guard, ordered some guides* to clear the road, and to put the soldiers in two files, so that he might pass more at his ease. When we passed, we all heard many voices among the soldiers exclaiming, "It is well said, easily said, but but how shall we walk faster when we have nothing in our bowels!" *Ah, vraiment, vraiment! trimez, trimez,* (go on, go on,) *lorsqu'on n'a rien dans le fanal!* (stomach.) The Consul hearing these expressions from the mouth of a handsome looking voltigeur, ordered him to step out from his rank and file, and asked him if he had not received his rations? "No, not a bit, except this old crust of bread," showing it to the Consul. "Is that all?" "Yes General." "To what division do you belong?" "To General Regnier's." "Call him." After a severe examination in presence of the whole column, which had received the order to suspend its march, the commissaire de guerre was convicted of fraud and negligence, and was ordered to be shot at twenty paces from the column in less than twenty minutes. The wretched man (Pommier) was pitied but by few, and the following day the Army was well provided.

* A corps of young noblemen, of which he had made a particular guard, in imitation of the *Mousquetaires du Roi*.

FOREIGN MISCELLANY.

To Mariners.—*Extract of a letter from Captain Bayfield, R. N., dated Magdalen Islands, Aug.*, 1836. "There is a shoal known only to one or two persons on this island, that has probably caused the destruction of some of the vessels which have from time to time been missing; it has never been shown in any chart, has on it 18 feet of water, and it is seldom seen, never breaking except in heavy weather. It lies nearly 7 miles S. E. ½ E. Compass, from the east point of the Magdalens, and a very small ledge of rocks, exactly in the way of vessels passing to the southern end of those islands."

A sloop of war, named the Triomphante, constructed upon a new plan, is at this moment being got ready for sea, at Cherbourg, in France. Her guns are arranged in a novel manner, and she has neither fore or hind castle. She carries four short 18 pounders, and 16 mortars 30 pounders. The mortars will fire solid or hollow projectiles, and one of the latter falling on the enemy's vessel will be able to set her on fire. A ship of the force of the Triomphante will be able to cope with a 46 gun frigate built after the old plan.

Dover, *Sept.* 7.—Yesterday, at 2 o'clock, pursuant to an order issued from the Admiralty, a squadron of superannuated ships of the line, frigates, and other government vessels were put up for sale by Dutch auction, in the hall of the Admiralty office, Somerset place. The ships and vessels sold were the following:

	GUNS	TONS	LYING AT	SOLD FOR
Scarborough	74	1,745	Deptford	£6,229
Surly, lighter	—	137	Chatham	No bidder
Greenwich	74	1,754	Portsmouth	5,310
Salisbury	58	1,199	Portsmouth	No bidder
Swallow, packet brig		236	Plymouth	1,000
Zephyr, packet brig		228	Plymouth	640
Experiment	44	892	Liverpool	1,400
Santa Margarita,	36	993	Liverpool	1,710

Purchasers of King's ships are not allowed to refit any vessels larger than a sloop—all others must be broken up, nor is the agent of a foreign State allowed to purchase them.

The following is an instance of the rapidity with which intelligence can be conveyed to a great distance. The vote of the estimates for Algiers was passed by the Chamber of Deputies at half past four in the afternoon of the 11th June. The news reached Toulon by telegraph on the 12th, and on the same day a steam-packet set off with it for Algiers, where it was posted up in the town, and made generally known on the 14th, having thus been transferred from Paris to Algiers within the space of three days.

Floating Wood.—The prodigious quantity of wood brought by sea to Iceland, is thought by M. Eugene Robert, to come from two continents at least. Trees are thrown ashore there, sometimes without roots, and without bark, the latter being frequently found by the side, folded like a roll of parchment. M. Robert has not been able to procure any floating fruits, but he has ascertained that mahogany is often landed in Iceland in the above manner.

Euphrates Expedition.—The latest accounts from Syria state that the English Euphrates Expedition, under Col. Chesney, after surmounting numberless obstacles, and after the two steamboats, the Tigris and the Euphrates, had begun their voyages, had met with an accident. One of the steamboats had struck on a rock under water, and every exertion was making to repair it as far as was practicable.—*Swabian Mercury, June* 22.

Euphrates Expedition.—Recovery of the Tigris.—We learn, by advices received by way of Alexandria, from his Majesty's Consul at Alexandretta, that the iron steamer Tigris, forming part of the Euphrates expedition, the loss of which we lately reported as having been caused by a squall on the river Euphrates, has been recovered. She was found with her keel upwards a few days after the accident, without having suffered material injury. The last advices from Colonel Chesney states that the expedition was doing well.—*Malta Gazette.*

ARMY.

A Court of Enquiry, of which Lieut. Col. Burbank, 5th infantry, is to be President, will convene at Fort Gibson on the 20th December next, to examine into the nature of the accusations made against Lieut. Colonel R. B. Mason, by Lieut. L. B. Northrop, both of the 1st regiment of Dragoons.

Brevet Major G. Loomis, 1st infantry, placed in the exercise of his brevet rank during the absence of the Major [Bliss] of his regiment on recruiting service.

Capt J. A. Phillips, 7th infantry, assigned to temporary Indian emigrating duty.

NAVY.

VESSELS REPORTED.

Frigates Constitution, Commo. Elliott, and Potomac, Capt. Nicholson, ship John Adams, Capt. Stringham, and schr. Shark, Lt. Comdt. Boerum, arrived at Corfu 30th July. The Shark, it is said, requires extensive repairs.

Frigate Brandywine, Commo. Wadsworth, and schr. Boxer, Lieut. Comdt H. N. Page, were at Callao, 14th June.

Ship Erie, Commo. Renshaw, sailed from Rio Janeiro for Montevideo, on the 12th July.

Brig Porpoise, Lt. Comdt. Ramsay, sailed from Charleston on Monday, 3d inst. for Brunswick, Geo., having on board the Commissioners appointed to examine the S. E. coast of the United States, in order to ascertain the most eligible site for a naval depot.

Lieut. Arthur Lewis has been detached from the Porpoise.

Brig Dolphin, Lieut. Comdt. McKenney, sailed from New York on the 6th inst., for the coast of Africa.

DEATHS.

At New York, on Sunday, 9th inst., HARRY PERCY T. WOOD, passed Midshipman in the U. S. Navy, aged 26 years, and second son of Wm. B. Wood, of the Theatre.

In Annapolis, on the 19th ult., after a short illness, THEODORICK BLAND, son of Capt. ISAAC MAYO, of the U. S. navy, aged 2 years and 4 months.

Near the Warm Springs, Tennessee, at the residence of Col. Alfred Russell, on the 30th Aug., Capt JOHN MAYRANT, in the 77th year of his age. The deceased was the last surviving officer of the crew of the Bonne Homme Richard, at the time of the memorable battle fought with the Serapis frigate in the English Channel.

NAVY COMMISSIONERS' OFFICE,
5 September, 1836.

SEALED PROPOSALS, endorsed "Proposals for Navy Yard, Pensacola," will be received at this office, till 3 o'clock, P. M. of the 15th day of October next, for furnishing the following articles, to be delivered at the Navy Yard, Pensacola, or at such place near it, as the Commandant of the Navy Yard may direct, viz:

One million, three hundred and thirty thousand very hard burnt bricks, of the best quality, excepting face or pressed bricks.

Four hundred and twenty barrels of the best Thomaston lime, and sixty-five barrels of the Hydraulic cement.

Also, a sufficient quantity of best *Imperial* slate, to cover, in a proper manner, two hundred and ten squares, of one hundred square feet each.

The proposal must be made separately for the bricks; for the lime and cement; and, for the slate. The prices must be per thousand for the bricks, per barrel for the lime and cement, and per square foot for the slate, including all expenses, till delivered and approved. One-fourth of the bricks and lime, and all the cement, must be delivered on or before the fifteenth day of January next; one fourth of the bricks and lime on or before the first of March next; and the whole on or before the first day of May next—the whole of the slate must be delivered on or before the first day of February next.

All the articles will be subject to inspection, when delivered at the Navy Yard, by such persons as the Commandant may appoint, and must be in all respects to the perfect satisfaction of the said Commandant, or they will not be received. When the articles shall be inspected, approved, and receipted for, bills will be approved by the Commandant for ninety per centum of the amount of the articles so receipted for, which, when presented to the Navy Agent, will be paid by him within thirty days; the other ten per cent will be retained, as additional security to the bonds which will be required, until the deliveries shall be completed; and is to be forfeited to the United States, in case the contracts which may be entered into are not performed according to their tipulations. Sept. 8—td

NAVY COMMISSIONERS' OFFICE,
September 12, 1836.

SEALED proposals will be received at this office until three o'clock, P. M. of the twenty-fourth day of October next, for furnishing and delivering at each of the Navy Yards, Charlestown, Massachusetts; Brooklyn, New York; Philadelphia, and Gosport, Va. the following described White Oak Knees, viz.

Dagger or *Hanging Knees*, with bodies not less than seven feet long, and arms not less than five feet long: which arms shall be of sizes which will give a nett siding when worked, as follows, for the numbers placed opposite to each:

Two hundred and seventy-five, to side eight inches.
Eighty, to side nine inches;
Eighty, to side nine and a half inches;
Two hundred and ten, to side ten inches;
One hundred and ten, to side eleven inches;

Of which, one fourth of each siding may be *out square*, but not to form an angle greater than one hundred degrees.

Lodge Knees, with bodies not less than five feet long, and arms not less than five feet long; which arms shall be of sizes which will give a nett siding when worked, as follows, for the numbers placed opposite to each:

One hundred and fifty, to side six and a half inches;
One hundred and fifty, to side seven inches;
One hundred, to side eight inches;
Two hundred, to side eight inches;
Eighty, to side nine inches;
Ninety, to side nine and a half inches;
One hundred and fifty, to side ten inches;
Eighty, to side eleven inches;

Of which, at least one fourth of each siding must be *in-square*, one fourth may be *out-square*, not to form an angle greater than one hundred degrees; and the remainder may be square.

Separate proposals will be received for any one or more of the numbers proposed, of each siding, and for each kind, but the offers must state a separate price for each siding of each kind, whether Dagger and Hanging, or, Lodge Knees, and not an average price, upon the presumption that any given number of each will be contracted for.

All the Knees must be of the best quality of White Oak, sound, and free from all defects. The limb knees need not have the arms sided to working dimensions, but the bodies must be sided to the diameter of the arm. Knees that have root arms are to be rough sided within two inches of their nett siding The moulding size of the body must be not less than twice the siding of the arm, measuring in the middle of the body lengthwise.

The nett siding and the length of the arms, as well as other dimensions to which the knees will work, and their quality and conformity to contract, will be determined by the inspector of timber at the Navy Yard where they are delivered, or by such other person as the commandant may direct.

The whole quantity contracted must be delivered on or before the first day of December, 1837, and as much earlier as the contractors please.

Persons offering must state their residence, and nearest Post Office, and the names and residence of the persons who are willing to be their sureties.

Ninety per centum of the value of deliveries will be paid by the Navy Agent at the place of delivery, within thirty days after the bills for the same shall be duly approved and presented to him, and ten per centum will be withheld until the completion of the contracts, and to be forfeited to the United States in case of non-performance.

The Commissioners of the Navy reserve to themselves the right of not accepting any of the offers, if they should be deemed unreasonably high.

Sept. 22.—t240

NOTICE.

ALL persons indebted to the estate of the late Lieut. W. E. BASINGER, deceased, are requested to make immediate payment; and those having claims against the said estate will present them to the undersigned, before the 1st of January next.

JNO. C. CASEY, *Adm'r.*

FORT BROOKE, FLO. *3d Sept.* 1836.
Sept. 22—8t.